

NOTE IV.

A REVIEW OF THE GENUS RHIPIDURA,

WITH AN ENUMERATION OF THE SPECIMENS IN
THE LEYDEN MUSEUM

BY

J. BÜTTIKOFER.

When occasionally looking over the specimens of the genus *Rhipidura* in our Museum, there were so many puzzling questions which could not be satisfactorily dissolved at once, that I decided to a comparative revision of the whole genus. This revision is not solely based upon our own material, but also on the rich and well-arranged collection in the British Museum, which I had the good fortune to look through during my recent visit to London, and amongst which I found several species, which were published after the issue of Dr. Sharpe's excellent Catalogue of the Muscicapidae. As in this catalogue the synonymy of each species is well-established up to the date of its issue, it would be of very little value to give it here once more, and I restricted, therefore, all synonymical remarks to those species about which I differ from the author of the Catalogue and to the species which were published afterwards.

As to the limits of the genus, I agree with Dr. Sharpe

Notes from the Leyden Museum, Vol. XV.

in including the genera *Leucocerca* and *Sauloprocta*; moreover I found, and Dr. Sharpe adheres now to this opinion, that the genus *Neomyias*, established in his catalogue, has to be reunited with *Rhipidura*.

The genus, as it is understood in this review, contains the considerable number of 75 species, of which five are described here as new.

Although I was fully aware of the difficulties to meet with, I made an attempt to find a natural order in which to place the numerous species of this genus. For this purpose I divided the whole genus into a group with small (13 cm. or less) and another with large bill (more than 13 cm.). This classification is, I am sorry to say, not quite perfect, as the last species of the small-billed group, *R. albiventris* from the Philippines, would, in fact, rather belong to the second group. On account of its red back, however, which forms a characteristic of a section of the first group, and its near relationship to *R. cyaniceps*, I prefer to close the first group with it, rather than placing it at the head of the second. On the other hand I placed in my second group, for similar reasons, a species with short bill, *R. pectoralis*, as it has no other relationship whatever with the short-billed group. The further classification of the species of each group into well-defined sections and subsections will be learnt from the key to the species, and I am pleased to say that but a very few species had to be placed, as it were by force, into one or other section of the genus.

I cannot close these few introductory lines without any expression of gratitude, especially to the address of Dr. Sharpe, for the kindness with which I was allowed to examine the rich materials in the British Museum and to increase the number of our species of this genus with such which were hitherto wanting in the series of the Leyden Museum.

Key to the species.

- A. Bill small, not more than 13 cm. in length from front 1).
- a. Dark form, no rusty red or cinnamon on upper surface.
- a'. Some of the tail-feathers, if not all, with white shafts.
- a''. Shafts of all the tail-feathers white.
- a'''. Inner web of tail-feathers entirely white. *flabellifera* 1.
- b'''. Inner web of tail-feathers only edged with white *bulgeri* 2.
- b'. Shafts of centre pair of tail-feathers brown.
- a'''. Breast and abdomen uniform ochraceous.
- a⁴. Lower throat dark, either black or gray.
- a⁵. Outer web of outermost tail-feathers entirely white.
- a⁶. Throat-patch black { *albiscapa* 3.
diemenensis 4.
- b⁶. Throat-patch gray, chest also gray, streaked with ochraceous buff . . . *preissi* 5.
- b⁵. Outer web of outermost tail-feathers dull white, brownish at tip. . . . *pelzelni* 6.
- c⁵. Outer web of outermost tail-feathers and tips to all the tail-feathers smoky brown. *brenchleyi* 7.
- b⁴. No dark throat, the whole lower surface, except the white chin and upper throat, being ochraceous buff *cervina* 8.
- b'''. Breast and abdomen not uniform ochraceous.
- a⁴. Chin black with hoary gray margins, throat, chest and breast uniform dull ashy brown *nebulosa* 9.
- b⁴. Throat white, broadly edged with black *spilodera* 10.
- c⁴. Throat entirely white, chest and breast black with white edgings *verreauxi* 11.
- b'. No white shafts in the tail-feathers.
- a''. Upper and lower surface dark, nearly uniform.
- a'''. No white superciliary stripe.
- a⁴. Upper and lower surface, with the exception of the black head and tail, sooty brown, tinged with olive *fuliginosa* 12.

1) An exception from this rule is formed by *R. albiventris*, which, for its larger bill, would belong to the large-billed group, but is placed here on account of its very near relationship to *R. cyaniceps*.

- b*⁴. Upper and lower surface black. *fallax* 13.
b^{'''}. With a white superciliary stripe.
*a*⁴. Tail uniform *atra* 14.
*b*⁴. Tail broadly tipped with white *albicollis* 15.
b^{''}. Above gray, earthy brown or chocolate-brown, abdomen either pale chestnut, fulvous or white.
a^{'''}. No black patch on lower throat, which is, as well as the chest, white with dusky brown streaks.
*a*⁴. Outer web of two pairs of outermost tail-feathers white on its terminal half, back earthy brown *layardi* 16.
*b*⁴. Only the outermost tail-feather with the outer web white, back tinged with chestnut brown.
*a*⁵. Dusky streaks on chest numerous, broad *erythronota* 17.
*b*⁵. Dusky streaks on chest narrower and less numerous. *rufilateralis* 18.
b^{'''}. Lower throat black, forming a more or less complete cross-band.
*a*⁴. Chest, breast, flanks and abdomen pale chestnut. *hyperythra* 19.
*b*⁴. Chest below the cross-band uniform white, unscaled.
*a*⁵. Upper surface ashy gray *albilimbata* 20.
*b*⁵. Upper surface earthy brown *personata* 21.
*a*⁴. Chest white with black centres, giving it a scaly appearance.
*a*⁵. Upper surface smoky brown. *kubaryi*. 22.
*b*⁵. Upper surface chocolate brown. *melanolaema*. 23.
b. Lower back always rusty red or cinnamon.
a[']. Forehead black.
a^{''}. Tail entirely cinnamon.
a^{'''}. Lores black *phoenicura* 24.
b^{'''}. Lores white *opisterythra* 25.
b^{''}. Tail brown, red at extreme base, all the tail-feathers, except the innermost pair, tipped with white *squamata* 26.
b[']. Forehead white, rest of upper surface cinnamon-rufous. *elegantula* 27.
c[']. Forehead red.
a^{''}. Tail-feathers tipped with white or ashy white.
a^{'''}. Dark parts of tail black or dark brown.
*a*⁴. Entire throat black, leaving only a nar-

- row space on the chin and a moustachial streak white.
- a*⁵. Feathers on the abdomen unstriped . *uraniae* 28.
- b*⁵. Feathers on the abdomen with a dark shaft-streak *astrolabi* 29.
- b*⁴. Upper throat white.
- a*⁵. A black patch on lower throat, chest scaly, the black feathers being edged with white.
- a*⁶. Upper back olive-brown, contrasting with the lower, which is rich cinnamon-red *rubrofrontata* 30.
- b*⁶. Upper surface rich brown with a reddish tinge *versicolor* 31.
- c*⁶. Upper surface cinnamon-rufous . . *semirubra* 32.
- b*⁵. Lower throat black, chest uniform . *russata* 33.
- b*^{'''}. Dark parts on tail brown, more or less tinged with pearly gray.
- a*⁴. Mantle olive-brown, contrasting with the red back.
- a*⁵. Chest scaly, the black feathers being edged with white.
- a*⁶. Entire basal half of tail-feathers red *rufifrons* 34.
- b*⁶. Extreme base of tail-feathers only edged with red. *dryas* 35.
- b*⁵. Chest below the black throat-patch uniform white *semicollaris* 36.
- b*⁴. Mantle rufous, like back and rump.
- a*⁵. A narrow black patch on lower throat. *hamadryas* 37.
- b*⁵. Black throat-patch very broad, reaching nearly up to the chin which is white, as also a broad moustachial streak, running down along the sides of the black throat *celebensis* 38.
- c*⁵. No black patch on lower throat, which is ashy fulvous *rufidorsa* 39.
- b*^{''}. Two basal thirds of tail-feathers pale chestnut, terminal third black, three outermost pairs narrowly edged and tipped with fulvous *teysmanni* 40.
- c*^{''}. Tail sepia brown, extreme base, outer web of outermost tail-feathers, and broad tips to all the tail-feathers deep rusty red.
- a*^{'''}. Shafts of tail-feathers dark brown, wing 7,5 cm. *lepida* 41.

- b'''*. Shafts of tail-feathers rich glossy copper-bronze, wing 6,4 *brachyrhyncha* 42.
- d''*. Two centre pairs of tail-feathers black, four outermost pairs uniform pale cinnamon like the whole plumage *cinnamomea* 43.
- d'*. Forehead blue like the crown.
- a''*. Abdomen fulvous *cyaniceps* 44.
- b''*. Abdomen white *albiventris* 45.
- B. Bill large, measuring more than 13 cm. from front ¹⁾.
- a*. Inner tail-feathers uniform dark brown, outer uniform fulvous or isabel.
- a'*. Outer tail-feathers pale cinnamomeous . . . *fuscorufa* 46.
- b'*. Outer tail-feathers isabel with a tinge of fulvous.
- a''*. Upper surface olive-brown, tinged with ashy, outer edge of quills dull rufous. *diluta* 47.
- b''*. Upper surface earthy brown, without any grayish tinge, quills edged with lively rufous *sumbawensis* 48.
- b*. Tail uniform dark brown or black, or dark with white tips.
- a'*. Under tail-coverts black or sooty brown, sometimes narrowly tipped with white.
- a''*. Back olive-brown, tail uniform sooty black.
- a'''*. Abdomen and flanks ashy olive or olive brown, never sooty brown *threnothorax* 49.
- b'''*. Abdomen and flanks sooty black . . . *rosenbergi* 50.
- b''*. Back sooty brown, tail-feathers broadly tipped with white.
- a'''*. Centre tail-feathers entirely black . . . *(maculipectus* 51.
tenebrosa 52.
- b'''*. All the tail-feathers tipped with white . *leucothorax* 53.
- b'*. Under tail-coverts white or fulvous.
- a''*. Upper surface ashy gray, never tinged with brown.
- a'''*. Throat gray or spotted, never pure white.
- a⁴*. Throat and chest uniform bluish ashy gray *euryura* 54.
- b⁴*. Throat and chest spotted with white.
- a⁵*. Abdomen and under tail-coverts white *perlata* 55.
- b⁵*. Abdomen pale ochraceous, under tail-coverts white *tenkatei* 56.
- c⁵*. Abdomen and under tail-coverts fulvous *buruensis* 57.
- b'''*. Throat pure white, a broad chest-band either uniform gray or spotted with white.

1) An exception from this rule is made by *R. pectoralis*, its bill being not more than 13 cm. in length. It has, however, its nearest allies in the large-billed group.

- a*⁴. Chest-band distinctly spotted with white.
- a*⁵. No white tips on the tail-feathers.
- a*⁶. Tail uniform sooty black *cinerea* 58.
- b*⁶. Outer web of outermost tail-feather white on its terminal half. *lenzi* 59.
- b*⁵. Tips to two or three outer tail-feathers white.
- a*⁶. Abdomen ochraceous. *hoedti* 60.
- b*⁶. Abdomen white *vidua* 61.
- b*⁴. Chest-band uniform or with some very narrow white shaft-streaks.
- a*⁵. Secondaries not or only faintly edged with white.
- a*⁶. Abdomen ochraceous *setosa* 62.
- b*⁶. Abdomen white *kordensis* 63.
- b*⁵. Secondaries broadly edged with white.
- a*⁶. Abdomen white *obiensis* 64.
- b*⁶. Abdomen pale ochraceous *finschi* 65.
- b*^{''}. Upper surface tinged with olive brown or earthy brown, never pure ashy gray.
- a*^{'''}. Upper throat white.
- a*⁴. Only the outermost pair of tail-feathers tipped with white *assimilis* 66.
- b*⁴. Two outermost tail-feathers tipped with white.
- a*⁵. A distinct gray chest-band with white lanceolate shaft-streaks to the feathers, white tip to the outermost tail-feather less than an inch. *isura* 67.
- b*⁵. No distinct gray chest-band, white tips to tail-feathers much more than an inch in length *rufiventris* 68.
- c*⁴. Four outermost tail-feathers tipped with white. *javanica* 69.
- d*⁴. No distinct white spots on tail-feathers, which are brown, becoming paler towards the tips. *pectoralis* 70.
- e*⁴. Five outer pairs of tail-feathers tipped with white. *nigritorquis* 71.
- b*^{'''}. Upper throat black, some feathers tipped with white.
- a*⁴. A black pectoral band, three outer tail-feathers tipped with white *auricularis* 72.
- b*⁴. No black pectoral band, five outer pairs of tail-feathers tipped with white. *albifrontata* 73.

- c''*. Upper surface, chin, throat and chest glossy black.
- a'''*. Inner secondaries broadly edged with white, feathers on chest centred with oval white spots *cockerelli* 74.
- b'''*. No white edgings to secondaries, chest unspotted *melanoleuca* 75.

1. *Rhipidura flabellifera* (Gm.).

A nearly adult specimen, with some spots on the wing-coverts still rufous, from New Zealand.

2. *Rhipidura bulgeri* Layard.

Two adult specimens from Noumea, New Caledonia.

3. *Rhipidura albiscapa* Gould.

Three specimens from »Australia" and two from New South Wales.

4. *Rhipidura diemenensis* Sharpe.

Rhipidura saturata (nec Salvad.) Sharpe, Cat. B. Br. Mus. IV, p. 311 (1879).

Rhipidura diemenensis Sharpe, Ibis, May 1879, p. 368.

Rhipidura sharpei Ramsay, Proc. Linn. Soc. N. S. Wales, 1879, p. 318.

Hab. Tasmania.

5. *Rhipidura preissi* Cabanis.

Rhipidura preissi Cab. Mus. Hein. I, p. 57 (1850); Sharpe, Cat. B. Br. Mus., IV, p. 310; id. P. Z. S. 1881, p. 387.

Hab. Western Australia.

6. *Rhipidura pelzelni* Gray.

Hab. Norfolk Island.

7. *Rhipidura brenchleyi* Sharpe.

One specimen from Aneitum, New Hebrides.

Notes from the Leyden Museum, Vol. XV.

8. *Rhipidura cervina* Ramsay.

Rhipidura cervina Ramsay, Proc. Linn. Soc. N. S. Wales, 1879, p. 340.

Rhipidura macgillivrayi Sharpe, P. Z. S. 1881, p. 789, pl. 67.

Hab. Lord Howe's Island.

9. *Rhipidura nebulosa* Peale.

Three specimens from Samoa.

10. *Rhipidura spilodera* Gray.

Hab. Banks Islands.

11. *Rhipidura verreauxi* Marie.

An adult male from Noumea, New Caledonia.

12. *Rhipidura fuliginosa* (Sparrm.).

One specimen from New Zealand.

13. *Rhipidura fallax* Ramsay.

Rhipidura fallax Ramsay, P. Z. S. 1884, p. 580.

Hab. Astrolabe Range, S. E. New Guinea.

This species seems to differ from *R. atra* Salvad. in wanting the white patch above the eye.

14. *Rhipidura atra* Salvadori.

Rhipidura atra Salvad. Ann. Mus. Civ. Genova, VII, p. 922 (1875); XII, p. 324 (1878).

Rhipidura brachyrhyncha (nec Schleg.) Sharpe, Cat. B. Br. Mus. IV, p. 316 (description of adult male); Salvad. (partim) Ann. Mus. Civ. Genova, XIV, p. 500 (1879); id. Orn. Pap. II, p. 72 (1881).

Adult male and female slaty black with a silky white patch above the eye. Young birds seem to have a red plumage, as Count Salvadori (Ann. Mus. Civ. Genova, VII, p. 922) mentioned a black bird with some red feathers, which latter may be considered the remnants of the immature plumage. The same seems to be the case with *R. flabellifera* (see Sharpe, Cat. Birds, IV, p. 309).

Adult male and female from Arfak, collected by Bruyn

Notes from the Leyden Museum, Vol. XV.

on February 13th and 15th 1876. The female has some rusty red feathers on the breast and near the base of the tail.

Unfortunately for the synonymy of this and other species, a great confusion was caused by the statement of Beccari's, that the specimens of *R. atra* Salvad. were nothing but the black males and the specimens of *R. brachyrhyncha* auct. recent. (nec Schleg.) the red females of one and the same species, which ought to bear, as the older, the name *R. brachyrhyncha*. Although this point of view he agreed with by our most eminent recent Ornithologists, I feel, after a near examination of the matter, quite unable to share this opinion. It is a rather strange supposition that, in only one species of such a large genus, male and female would be so strikingly different in color, the more as in our Museum as well as in the series treated of by Salvadori in the second volume of his Ornithologia delle Papuasias, one of the black specimens is said to be a female. The same is, moreover, the case with the only specimen of this species, found in the collections of the British Museum, being a black female from the Arfak Mountains.

Very curious is the fact that the red birds, which were considered, first by Dr. A. B. Meyer and afterwards by Dr. Sharpe and Count Salvadori, to belong to *R. brachyrhyncha* Schleg., are quite different from this latter species. They cannot be identified either with *R. brachyrhyncha* nor *R. atra*, of which they were believed to be the females, but belong to a quite different species, which is identical with *R. cinnamomea*, described by Dr. A. B. Meyer in Zeitschr. f. Ges. Orn. 1886, p. 17, pl. III, fig. 3.

15. *Rhipidura albicollis* Vieillot.

Rhipidura albicollis Vieill. N. Dict. d'Hist. Nat. XXVII, p. 13.

Rhipidura atrata Salvad. Ann. Mus. Civ. Genova, XIV, p. 203 (1879).

Rhipidura vidua (nec Salvad.) Schleg. in Snelleman, Sumatra Exp. Aves, pl. II (1884).

Three specimens from the Indian Continent and one

Notes from the Leyden Museum, Vol. XV.

(the type of *R. vidua*, figured in the above mentioned plate) from the Highlands of Padang, collected by the Dutch Expedition through Sumatra.

Our Sumatran specimen is not specifically different from *R. albicollis* from the Continent, of which I had the good fortune to get 75 specimens in the British Museum to compare with, amongst them one from Perak. One might say that, as a rule, the Sumatran specimens, of which I saw one in the British Museum, would have the white tips clearer white and longer than those from the Continent; I found, however, amongst the Indian birds enough specimens to form a series showing every degree of a gradation between *R. albicollis* and *atrata*, and the specimen from Perak certainly would belong to the latter, if it might be maintained as a distinct species. (See also Sharpe, on Birds from Perak, P. Z. S. 1887, p. 435, and Salvadori, Uccelli di Birmania, Annu. Mus. Civ. Genova, 1887, p. 590).

16. *Rhipidura layardi* Salvadori.

A male and two females from Viti Levu.

17. *Rhipidura erythronota* Sharpe.

A male from Vanua Levu.

18. *Rhipidura rufilateralis* Sharpe.

A male from Taviuni, Fiji Islands.

19. *Rhipidura hyperythra* Gray.

Rhipidura hyperythra Sharpe, Birds of New Guinea, Vol. II, pl. 33.

A specimen from Aru (von Rosenberg) and two from N. W. New Guinea.

20. *Rhipidura albilimbata* Salvadori.

Two males from Karons, N. W. New Guinea.

Notes from the Leyden Museum, Vol. XV.

21. *Rhipidura personata* Ramsay.

Two females, collected by Kleinschmidt on the Island Kandavu, Fiji group.

22. *Rhipidura kubaryi* Finsch.

An adult bird from Ponapé.

23. *Rhipidura melanolaema* Sharpe.

Hab. Vanikoro, New Hebrides.

24. *Rhipidura phoenicura* Müll. & Schleg.

Three specimens from Java, amongst which the two types, and a fourth specimen from Borneo.

25. *Rhipidura opistherythra* Selater.

Rhipidura opistherythra Selat. P. Z. S. 1883, p. 197; Sharpe, Birds of New Guinea, Vol. II, pl. 29.

Hab. Timor Laut.

26. *Rhipidura squamata* Müll. & Schleg.

Eight specimens: Adult male and female from Banda (types, voyage S. Müller), a male from Koor (von Rosenberg), a female from Matabello (von Rosenberg), male and female from Waigama, Mysol (Hoedt), a female from one of the small islands on the west-coast of Waigiou (Bernstein) and a specimen without indication of locality.

27. *Rhipidura elegantula* Sharpe.

Rhipidura elegantula Sharpe, N. L. M. 1879, p. 21.

The typical specimen, collected by Hoedt on the island of Lettie. A second specimen, from the island of Dammer, I had the opportunity to see in the British Museum.

28. *Rhipidura uraniae* Oustalet.

Rhipidura uraniae Oust. Bull. Soc. Phil. Paris, Mars 1881.

Rhipidura atrigularis Rchw. J. f. O. 1885, p. 110.

An unsexed specimen, acquired from Verreaux 1865, and erroneously said to come from Australia.

Notes from the Leyden Museum, Vol. XV.

This specimen agrees very well with the short description of *R. atrigularis* given by Dr. Reichenow, with the exception of its smaller size which is somewhat inferior even to the measurements of the typical specimen of *R. uraniae*. From all its red-fronted allies this species is very easily distinguished by its black throat, leaving only the chin and a rather narrow moustachial streak white.

Crown, nape, hind neck, mantle and upper back earthy brown, forehead and a superciliary stripe, lower back, rump and upper tail-coverts cinnamonaceous, lesser wing-coverts and scapulars like the mantle, median and greater sepia-brown, edged with earthy brown and tipped with pale fulvous, forming a double row of this color, quills sepia-brown, the outer edge fringed with paler brown; tail black, all the feathers broadly tipped with pure white, extreme base of all the tail-feathers rufous, the centre ones to a greater extent than the outer pairs; lores, sides of face, ear-coverts and sides of neck as well as the whole throat and upper chest black, the black feathers on the lower end of this large gular patch edged with white, giving the chest a scaly appearance, the chin as well as a narrow line running from it along the cheeks onto the sides of the neck and joining the sides of the chest, white. Lower chest dirty white, breast and abdomen pale fulvous, deepening into a more intense fulvous on abdomen, vent, flanks and under tail-coverts. Thighs cinnamon, under wing-coverts white, edge of wing fulvous, inner lining of the quills ashy. Bill brown, with base of lower mandible white, feet pale brown. Wing 6,5 cm., innermost tail-feathers 7,9, outermost 5,7, tarsus 1,8, culmen 1,1.

The pale tips to the median and greater wing-coverts seem to me to indicate a certain stage of immaturity.

The typical specimen of this species is stated to come from the Marianne Islands (Freycinet), while the type of *R. atrigularis* has been collected on the Pelew Islands (Kubary).

29. *Rhipidura astrolabi* Oustalet.

Rhipidura astrolabi Oust. Bull. Soc. Phil. Paris, Mars 1881.

Hab. Vanikoro, New Hebrides.

30. *Rhipidura rubrofrontata* Ramsay.

Rhipidura rubrofrontata Ramsay, Proc. Linn. Soc. N. S. Wales, 1881, p. 23; Salvad. (partim) Orn. Pap. III, p. 532 (1882); Sharpe, Birds New Guinea, Vol. II, pl. 26 (1886).

An adult male from Guadalcanar, Solomon Islands.

This species is very closely allied to *R. rufifrons*, but at once distinguished by the lesser extent and darker tinge of red on the base of the tail-feathers as well as by the pure white instead of ashy white tips to all the tail-feathers.

31. *Rhipidura versicolor* Hartl. & Finsch.

Hab. Island of Uap, Mackenzie group.

32. *Rhipidura semirubra* Selater.

Hab. Admiralty Islands.

33. *Rhipidura russata* Tristram.

Rhipidura russata Tristr. Ibis, 1879, p. 440; id. 1882, p. 142; Salvad. Aggiunte Orn. Pap. p. 78 (1890).

Rhipidura rubrofrontata Salvad. (partim) Orn. Pap. III, p. 533.

Hab. San Christoval, Solomon Islands.

34. *Rhipidura rufifrons* (Lath.).

Nine specimens from different parts of Australia, amongst which there is one from Melbourne with all the tail-feathers tipped with rufous instead of ashy white.

35. *Rhipidura dryas* Gould.

Rhipidura dryas Sharpe, Birds of New Guinea, Vol. II, pl. 32.

One specimen from Coburg Peninsula, Australia.

36. *Rhipidura semicollaris* Müll. & Schleg.

Besides the three typical specimens from Timor and one

Notes from the Leyden Museum, Vol. XV.

from Samao, all four collected by S. Müller, the series contains another specimen from Timor (von Rosenberg) and one from Ombaai, the most eastern island of the Flores group.

37. *Rhipidura hamadryas* Sclater.

Rhipidura hamadryas Sclat. P. Z. S. 1883, p. 54; Sharpe, Birds of New Guinea, Vol. II, pl. 30.

An adult female from Timor Laut, collected by H. O. Forbes.

38. *Rhipidura celebensis*, n. sp.

An unsexed specimen, collected by Teysmann at Macassar, Celebes.

Very closely allied to *R. semicollaris* from the Timor group, but easily distinguished by the darker tinge of the earthy brown parts of the upper surface and the broader black band across the lower throat and chest.

Crown, hind neck, fore-part of mantle, lesser wing-coverts and thighs dark earthy brown, fore-head, hinder part of mantle, whole back, rump and upper tail-coverts rufous, quills and greater wing-coverts sepia-brown, edged with the color of the crown, tail blackish with the upper surface iron gray on both webs of the innermost pair and on the outer webs of the other pairs, the outer web of all the tail-feathers, except the outermost pair, red near the base, tips to all the tail-feathers white, more broadly so towards the outermost pair, on which the white of the tip is running at some distance towards the base on the edge of the outer web. Lores, sides of face, lower throat and chest black, the very lowest part of the latter with white edgings to the feathers, the very broad throat-patch separated from the black cheeks and ear-coverts by a white streak, extending from the chin onto the sides of the chest, breast and abdomen pure white, flanks, vent and under tail-coverts tinged with fulvous, under wing-coverts white, inner edge of quills ashy whitish. Bill dark

brown, white at the base of the lower mandible, feet dark brown. Wing 6,6 cm., centre tail-feathers 8,5, outermost pair 6,2, tarsus 2, culmen 1,3.

39. *Rhipidura rufidorsa* Meyer.

A male from Karons, North West New Guinea, Coll. Bruyn.

40. *Rhipidura teysmanni*, n. sp.

An unsexed specimen, collected by Teysmann at Macassar, Celebes, 1878.

This species belongs to the group with the forehead, back and base of tail-feathers cinnamon-red, and *R. rufifrons* from Australia may be considered its nearest ally. From this latter, as well as from the other species of the mentioned group, it differs principally in the red of the basal part of the tail being much more widely distributed, fully occupying the two basal thirds and being as plainly visible on the under surface as on the upper, while in all the other species the tail, when closed, hardly will show any red region beyond the under tail-coverts.

Crown, sides of head, the neck and upper part of mantle olive-brown, front, back, rump, flanks, thighs, upper and under tail-coverts, the two basal thirds of all the tail-feathers above and below, cinnamon red. Upper wing-coverts and quills sepia-brown, the first broadly edged with olive-brown, the latter, with the exception of the outermost, broadly fringed with cinnamon, innermost secondaries olive-brown, both webs fringed with cinnamon, under wing-coverts fulvous, quills very broadly edged on the inside with vinaceous, especially the secondaries; the terminal third of tail-feathers about an inch in length in the innermost and somewhat less in the outer pairs, sepia-brown, for about half their length fringed on the inner and outer webs with the color of the basal two thirds, the two innermost pairs very narrowly, the outermost broadly tipped with ashy fulvous. The shafts of the tail-

feathers have the color of the accompanying parts of their webs, but the red on the basal part is running, though not very far, into the black terminal third. Chin and upper throat pure white, a rather narrow black bar without any white edgings to the feathers, across the chest, centre of breast and abdomen pale fulvous with a rather whitish tinge, rest of under surface cinnamon. Bill blackish, whitish at base, feet pale brown. Wing 6,9 cm., centre tail-feathers 8, outermost 6, tarsus 1,9, bill from front 1,2.

I am much pleased to name this fine species after its discoverer, the late Mr. Teysmann, who, besides his well-known botanical investigations throughout the Indian Archipelago, spent much time in enriching the ornithological collections of the Leyden Museum.

41. *Rhipidura lepida* Hartl. & Finsch.

An adult female from Pelew (Museum Godeffroy).

42. *Rhipidura brachyrhyncha* Schlegel.

Rhipidura brachyrhyncha Schleg. Ned. Tijdschr. voor de Dierk. IV, p. 42 (1873).

Rhipidura rufa Salvad. Ann. Mus. Civ. Genova, VII, p. 923 (1875); Sharpe, Cat. Birds Br. Mus. IV, p. 323; Salvad. Orn. Pap. II, p. 71 (1881).

A female, collected by von Rosenberg at Hattam, North West New Guinea, 1870.

As I have already pointed out when treating of *R. atra*, the birds considered to be *R. brachyrhyncha* by Meyer, Salvadori and Sharpe are not identical with *R. brachyrhyncha* Schleg., and it is by mistake that Salvadori states to have examined the type of the latter, which is still preserved unstuffed in the magazines of the Leyden Museum. Most likely Salvadori took our stuffed female of *R. meyeri* mihi for the type of Schlegel's *R. brachyrhyncha*, as this specimen bears the latter name in his hand-writing. Although Schlegel's description of *R. brachyrhyncha* is very

clear, and sharply pointing to the characters which make this species a near ally of *R. lepida*, I redescribe it here in extenso:

Head, mantle and lesser wing-coverts dusky fulvous, superciliary streak and nuchal region tinged with ferrugineous, back, rump and upper tail-coverts deep ferrugineous, quills and greater wing-coverts sepia-brown, both margined with the color of the back, giving the whole wing a rusty appearance. Tail dark brown, with glossy red shafts, extreme base of the centre tail-feathers and of the outer web of the others ferrugineous, with which color the outer webs of all the tail-feathers are fringed nearly down to the end; tips of all the tail-feathers at the length of about half an inch deep bay, making the tail, when seen from underneath, like that of *R. lepida*, with the exception that in the latter the red tips are longer and the red is running along the whole outer edge of the outermost pair, while in *R. brachyrhyncha* the outermost pair is not edged with red exteriorly. The underparts of the bird are pale grayish fulvous, more intensely fulvous on breast and abdomen, and cinnamomeous on the under tail-coverts. Under wing-coverts fulvous, inner lining of the quills vinous bay, bill very short and pale, lower mandible, with the exception of the darker tip, white, feet and claws pale yellow. Wing 6,4 cm., tail 8,7, tarsus 1,9, culmen 1,1.

The essential differences between *R. brachyrhyncha* Schl. and *R. meyeri* mihi (= *R. brachyrhyncha* auct. nec Schl.) are to be sought for in the color of the tail, which in the first species is dark brown with red base and red tips, while in the second the centre tail-feathers are entirely black, the outer entirely cinnamomeous.

43. *Rhipidura cinnamomea* ¹⁾ Meyer.

Rhipidura brachyrhyncha (nec Schleg.) Meyer, Sitzb. k. Akad. d. Wiss. Wien, LXIX, p. 501 (1874); Sharpe, Cat. B. Br. Mus. IV,

1) See the observations about this species antea, under the heads *R. atra* and *brachyrhyncha*.

p. 316 (description of the female); Salvad. Ann. Mus. Civ. Genova, XIV, p. 500 (1879); Orn. Pap. II, p. 72 (♀).

Rhipidura cinnamomea Meyer, Zeitschr. f. ges. Orn. III, p. 17, pl. III, fig. 3 (1886).

A female collected by Bruyn, and an unsexed specimen collected by Woelders, both from Arfak, N. W. New Guinea.

General color cinnamon, somewhat paler below than above, especially on chin and throat, which are pale fulvous. Crown and hind neck tinged with olive; quills and wing-coverts dark brown, edged with the color of the back, under wing-coverts and inner edge of quills cinnamon. Three outermost pairs of tail-feathers uniform cinnamon, the fourth pair cinnamon on the outer, black on the inner web, the two innermost pairs entirely black. Bill very short, the bristles reaching beyond the tip, upper mandible black, lower white, feet pale flesh-color. Wing 7,1 cm., tail 8, outermost pair 6, tarsus 2, culmen 1,2.

In the distribution of the colors on the tail-feathers this species agrees with the two following: *R. cyaniceps* and *albiventris*, but there seems to occur some individual difference, probably due to age. While in our above described specimen the fourth tail-feather has the inner web entirely black, the other specimen has one of the feathers of the fourth pair nearly almost black on the inner web, while the other feather of the same pair has only a basal part of the inner web black and the whole rest cinnamomeous. In the specimen erroneously described by Dr. Meyer as *R. brachyrhyncha* (Sitzb. Wien, LXIX, p. 501) the black on the tail-feathers seems, on the other hand, to be more widely distributed, as it occupies not only the whole outer web of the fourth pair, but also the edge of the inner web of the third and the base of the inner web of the second, leaving only the first (outermost) pair entirely red. Dr. Meyer's type is the first male which is as yet known of this hitherto wrongly understood species.

Salvadori (Aggiunte Orn. Pap. 1890), considering *R. cinnamomea* to differ specifically from what he says to be

the female of *R. brachyrhyncha*, believes the first named form to be the female of the black *R. fallax* Ramsay, thus forming a case analogue to his *R. brachyrhyncha*, in which the red female is also said to belong to a black male (*R. atra*).

44. *Rhipidura cyaniceps* (Cass.).

One specimen from the Philippine Archipelago.

45. *Rhipidura albiventris* (Sharpe).

One specimen from Guimaras, Philippine Archipelago.

46. *Rhipidura fusciorufa* Sclater.

Rhipidura fusciorufa Sclat. P. Z. S. 1883, p. 197, pl. XXVII.

Two specimens from the Tenimber group of Islands.

This is the first of a group of three large-billed species, which are in some way related with the small-billed forms *R. cinnamomea*, *R. cyaniceps* and *R. albiventris*, having the two centre tail-feathers uniform black, while the outer pairs are pale, at least on their outer webs, and never tipped with rufous or white. Upper surface earthy brown, head darker, a white spot above the eye, median and greater wing-coverts and secondaries, especially the innermost, broadly margined with pale rufous, two innermost pairs of tail-feathers black, the next pair black with rufous edge and tip, three outermost pairs entirely pale rufous, chin and throat white, chest-feathers gray at base, with very large white tips, giving the whole chest a white appearance like in the preceding species, rest of under surface, including the under wing-coverts, pale rufous.

47. *Rhipidura diluta* Wallace.

Rhipidura diluta Wall. P. Z. S. 1863, p. 491.

One specimen from Flores.

Upper surface grayish brown, forehead much darker, wing-coverts and secondaries edged with dark rufous,

three central pairs of tail-feathers uniform brown, next pair with paler tip, two outermost pairs dirty whitish, darker at the base of the inner web, chin, throat and a narrow line from the nostril above the eye white, chest and sides of body ashy brown, rest of lower surface including the under wing-coverts ashy fulvous. Bill narrower than in the allied species.

48. *Rhipidura sumbawensis*, n. sp.

Two specimens from Sumbawa, presented by Mr. van Lansberge, 1882.

Closely allied to *R. diluta*, but with much broader bill, with the upper surface much paler brown, the quills edged with very clear rusty red, the three outermost pairs of tail-feathers more fulvous, less ashy than in *R. diluta*, and the lower surface much more strongly tinged with fulvous.

Forehead and lores blackish, crown rufous brown, whole back and rump pale earthy brown with no grayish tinge at all, upper tail-coverts darker; upper wing-coverts like the back, median and greater as well as the primary coverts externally edged with rufous, quills brown, broadly margined with clear rusty red. Three innermost pairs of tail-feathers uniform sepia-brown, paler than in *R. diluta*, fourth pair broadly tipped with fulvous, fifth pair fulvous nearly up to the base, the outermost pair entirely fulvous with much paler outer web. Throat and a streak from the nostril above the eye white, duller in younger specimens, rest of under surface pale fulvous, somewhat tinged with ashy, under wing-coverts and thighs uniform clear fulvous, inner edge of quills vinous red. Bill broad, black, paler at base of lower mandible, feet flesh-color, iris black. Wing 8 cm., tail 8,7, outermost pair 7,3, bill 1,4, tarsus 2. A probably younger specimen is smaller, the wing having 7,4, the tail 8 cm.

The comparison of our Sumbawa specimens with four specimens of *R. diluta* from Flores in the British Museum,

amongst which the type of the species, convinced me that the first really belongs to a new, hitherto overlooked species.

49. *Rhipidura threnothorax* Müll. & Schleg.

Rhipidura threnothorax Müll. & Schleg. Verh. Land- en Volkenk. p. 185 (1839-44); Meyer, Sitzb. k. Akad. d. Wiss. Wien, LXIX, p. 212 (1874); Sharpe, Cat. B. Br. Mus. IV, p. 325 (1879); Salvad. Orn. Pap. II, p. 54 (1881).

Rhipidura fumosa Schleg. Ned. Tijdschr. voor de Dierk. IV, p. 42 (1873); Salvad. Orn. Pap. II, p. 56 (1881).

Rhipidura ambusta Ramsay (teste Sharpe and Salvadori).

This species, with which I unite, in accordance with Dr. Sharpe, *R. fumosa* Schleg., is easily distinguished from all its congeners with white-spotted breast by its uniform sooty black tail. I have before me a series of five specimens, each in a different dress, which, as I think, we have to consider as so many different stages of age, of which it will be useful to give here a short description.

a. First stage: Young female from Jobi, collected by von Rosenberg, April 23rd 1869 (type of *R. fumosa* Schleg.). Above dark olive-brown, hind neck, mantle and back strongly tinged with rusty, rump, upper tail-coverts, abdomen, vent, thighs, under tail-coverts and tail sooty black; wing-coverts and quills dark smoky brown, under wing-coverts somewhat paler; chin, throat and a superciliary stripe white; chest, breast and flanks pale olive-brown, the upper chest with numerous hidden, small whitish spots, which, I think, will be the beginnings of the larger and purer white spots of the more developed stages of plumage. The bill is also showing a mark of immaturity, the lower mandible being white with a partially black tip, while it is, as a rule, pure white in the adult bird. The upper mandible as well as the feet are in all stages blackish brown. The wing, compared with the more advanced stages, is very short, measuring only 7 cm., tail 9, tarsus 2,1, culmen 1,5.

This or a perhaps somewhat more advanced stage is

described by Dr. A. B. Meyer in the above cited Sitzungsberichte.

b. Second stage: Female, collected by S. Müller, together with the typical specimen at the bay Lobo, S. W. New Guinea. General color above and below considerably much paler than in specimen *a*, probably owing to its having, as a stuffed specimen, been much more exposed to the light. The white on chin and throat extending upon the cheeks, the chest grayish olive instead of olive-brown, each feather bearing, in its centre, a large cordiform dirty white spot of four millimetres in width. No black at all on the chest, the outermost of the under wing-coverts edged with white, lower mandible white with a blackish mark near the tip. Wing 7,5 cm., tail 9,4, tarsus 2,2, culmen 1,5.

c. Third stage: Female, collected by Bernstein at Sorong, January 20th 1865. Differs from the preceding specimen in having the head and back less tinged with rufous, in being more ashy olive on chest and breast and in having the cordiform spots much purer white and on most of the feathers, especially near the throat, encircled with black. Under wing-coverts as in the previous specimen. Hardly any black at the tip of lower mandible. Wing 8 cm., tail 9,2, tarsus 2, culmen 1,7.

d. Fourth stage: An unsexed specimen from New Guinea (Frank, 1873). Similar to the former specimen, but having the white spots on the chest very large with all the surrounding parts of each feather entirely black, while many of the grayish olive breast-feathers, especially on the centre of the breast, bear concealed white, cordiform spots without black surrounding. Under wing-coverts very conspicuously tipped with white, and some of the outermost lesser wing-coverts also tipped with white. Lower mandible entirely white. Wing 8 cm., tail 9,8, tarsus 2,3, culmen 1,7.

e. Fifth stage(?). Type of the species (σ^7), collected by S. Müller at the bay Lobo, S. W. coast of New Gui-

nea. Similar to the former specimen, but the white spots on the black chest very much smaller, hardly two millimetres broad, and drop-shaped, very narrow at the base, becoming broader and round at the end, none of them cordiform as in the preceding specimens. Some of these white drop-shaped spots are found, partially visible, partially hidden, on the ashy olive feathers of the breast. Lower mandible entirely white. Wing 8 cm., tail 8,6, tarsus 2,2, culmen 1,5.

It is not without some hesitation that I unite this specimen, the type of the species, with the four former ones, the difference in form and size of the white spots on the chest being so very striking; but on the other hand the large-spotted specimen, described above as the second stage, is found by S. Müller together with the small-spotted typical specimen, and considering, moreover, the fact that in the allied *R. maculipectus* the small and the large form of white spots are found in one and the same individual, it would be rather venturous to base a new species upon the difference in size of the white chest-spots only.

The British Museum contains a specimen similar to stage four from Salwati, another from »New Guinea” and one from the Astrolabe Mountains, which latter is the form described as *R. ambusta* by Ramsay.

50. *Rhipidura rosenbergi*, n. sp.

A female, collected by von Rosenberg at Wonoembaai, Aru, agrees with the preceding species in the olive-brown upper surface, the uniform sooty black tail, the entirely white throat and the black, white-spotted chest, but differs from it in having below the white throat the whole under surface sooty black, almost as intense as the chest, and not only is the chest, but also the breast, spotted with white. These two latter characteristics make it a near ally of *R. maculipectus*, from which it is, however, distinguished by the olive-brown upper surface, the uniform black tail and the entirely white throat.

Crown, hind neck and mantle and back olive-brown, the latter somewhat tinged with rufous, the rump darker, upper tail-coverts, tail, flanks, abdomen, thighs and under tail-coverts sooty black, the outermost tail-feathers with a very slight indication of a white tip; lesser wing-coverts and some of the median blackish, tipped with white, rest of the wing-coverts and all the quills smoky brown, narrowly fringed with paler brown on the outer webs; under wing-coverts sooty brown, tipped with white; chin, cheeks, entire throat, front and a broad superciliary stripe pure white, the latter bordered at its upper edge with deep black, strongly contrasting with the olive-brown crown; lores, a streak underneath the eye, and ear-coverts sooty black; chest and breast pure black with a large heart-shaped, pure white spot towards the end of each feather, only the upper region of the chest the white spots are wanting on some feathers, while they are smaller and more drop-shaped on the others. Bill black, lower mandible white, blackish at the tip, feet dark brown. Wing 8 cm., tail (incomplete) 9,8, outermost pair 8, tarsus 2,4, culmen 1,5.

This form might be considered to be a very old stage of *R. threnothorax*, in which the whole lower surface had become entirely black, but the black tip to the lower mandible shows that the bird cannot be very old, moreover the species *threnothorax* is not known as yet to live on the Aru Islands. In the British Museum I had the opportunity of seeing a specimen from Aru, which is somewhat paler brown on breast and abdomen than our typical specimen, and I think not to be wrong when considering the lower surface in the immature stages to be darker than in *R. threnothorax*, and more approaching the young of *R. maculipectus*.

51. *Rhipidura maculipectus* G. R. Gray.

Rhipidura maculipectus G. R. Gray, P. Z. S. 1858, p. 176; Sharpe, Cat. B. Br. Mus. IV, p. 326; Salvad. Orn. Pap. II, p. 56 (1881).

Notes from the Leyden Museum, Vol. XV.

Rhipidura saturata Salvad. Ann. Mus. Civ. Genova, XIV, p. 497 (1879); Orn. Pap. II, p. 58 (1881).

Four specimens (males and females) from Aru (von Rosenberg, 1865), a male from Haruko, a small island east from Amboina (Hoedt, 1863), one specimen from Mysol (von Rosenberg, 1866), two specimens from Salwati (Bernstein, 1863), a young female, the type of *R. saturata* Salvad., from Salwati (Bernstein, 1863) and two males from Sorong, New Guinea (Bernstein, 1864).

In accordance with Dr. Sharpe I consider the female specimen in our Museum, described as *R. saturata* by Count Salvadori, to be the immature stage of *R. maculipectus*, a stage showing very much analogy with that of *R. threnothorax*, described as *R. fumosa* by Schlegel. This analogy consists especially in the uniform color of the plumage, the shortness of the wing (7,2 cm. instead of 8,2), the black tip to the lower mandible and the nearly unspotted chest, while the white-tipped tail, the black throat and the sooty brown general color at once indicate its belonging to *R. maculipectus*. *R. fumosa* and *R. saturata* once admitted as the young stages of *R. threnothorax* and *R. maculipectus*, the idea must entirely be abandoned that the form I described above under the name of *R. rosenbergi*, after all might turn out to be some immature stage of *R. maculipectus*.

52. *Rhipidura tenebrosa* Ramsay.

Rhipidura tenebrosa Ramsay, Proc. Linn. Soc. N. S. Wales, VI, p. 835 (1881); Salvad. Orn. Pap. III, p. 535.

Hab. Solomon Islands.

53. *Rhipidura leucothorax* Salvadori.

Rhipidura episcopalis Salvad. Ann. Mus. Civ. Genova, VI, p. 311 (1874); Sharpe, Birds of New Guinea, Vol. II, pl. 26.

Rhipidura episcopalis Ramsay, Proc. Linn. Soc. N. S. Wales, II, pp. 371 and 377 (1878).

Four specimens from Sorong and Andai, N. W. New Guinea.

Notes from the Leyden Museum, Vol. XV.

This species has, as a rule, the chin black like the throat, but one of our specimens, as well as the only specimen of this species in the British Museum has the chin white.

54. *Rhipidura euryura* S. Müller.

Leucocerca euryura Salvad. Ucc. di Borneo, p. 136 (1874).

Neomyias euryura Sharpe, Cat. B. Br. Mus. IV, p. 342 (1879).

Three typical specimens from Java (Müller and Boie); a fourth specimen from Java and another from Sumatra, in which latter island this species was not known to be found as yet.

This species is easily known by its nearly uniform bluish gray color, having only the eyebrow, abdomen, under tail-coverts and a very small tip to the outermost tail-feather white.

55. *Rhipidura perlata* S. Müller.

Male and female (types), collected by S. Müller in Sumatra, and three specimens from Borneo.

These specimens, though all apparently adult, differ very much in size, the wing of the smallest specimen from Borneo being 7,9 cm., the largest 8,6, which is also the size of the typical specimens from Sumatra.

Whole upper surface bluish gray, chin, throat, chest and flanks sooty black, breast, abdomen and under tail-coverts white, the throat provided with narrow white shaft-streaks and the chest with large drop-like spots of the same color. Tail black, the three outer pairs of feathers very broadly tipped with white.

56. *Rhipidura tenkatei* Büttikofer.

The typical specimen from the island of Rotti (see N. L. M. 1892, p. 205). This species differs from *R. buruensis* by the large white tips to the two outermost pairs of tail-feathers.

57. *Rhipidura buruensis* Wallace.

Seven specimens, collected by Hoedt and Teysmann on the island of Bouru. This species is easily known by its ochraceous abdomen and under tail-coverts and the dirty white outer webs of the outermost pair of tail-feathers, while the rest of the tail is uniform sooty brown.

58. *Rhipidura cinerea* Wallace.

Hab. Ceram.

This species is distinguished by its uniform sooty black tail.

59. *Rhipidura lenzi* Blasius.

Rhipidura lenzi Blas. J. f. O. 1883, p. 145 (Celebes); Meyer, Isis, I, p. 26 (1884); Forbes, P. Z. S. 1884, p. 431 (Amboyna); Salvad. Aggiunte alla Orn. Pap. pt. II, p. 77 (1890).

Two males from Ceram(?) with the manuscript name of *R. forsteni* Temm. ¹⁾, and a female from Amboyna, collected by Hoedt in 1866.

All three specimens agree in their coloration with the description as given by Dr. Blasius, only would it be better to choose, for the general color, the expression *saturate cinerea* instead of *cinereo-nigra*. Dr. Blasius' bird is also a little larger than the three specimens in our Museum, but the individual difference in size in this group being rather considerable, this larger size is of hardly any specific value.

Type specimen, said to be from

North Celebes	wing 9,3 cm.	tail 9,0 cm.
Specimens said to be from Ceram	» 8,9 »	» 8,4 »
Specimen from Amboyna	» 8,6 »	» 8,2 »

Another specimen from Amboyna, collected by H. O. Forbes and now in the British Museum, is of the same size, the wing measuring 8,5, the tail 8,2 cm.

1) Salvadori, Orn. Pap. II, p. 64, erroneously identified *R. forsteni* with *R. cinerea* Wall.

Dr. A. B. Meyer, in his above quoted paper, developes the reasons for which he does not believe in Celebes being the habitat of *R. lenzi*, and not having seen any specimens of this species himself, he utters some doubts as to its specific value, the more as it is closely allied to *R. buruensis* and *R. cinerea*. I fully share Dr. Meyer's doubts as to the localities and believe Amboyna to be the only well-ascertained habitat of this species. Whether our two Ceram birds, which were acquired more than fifty years ago, are really from Ceram or not, is hard to say, and therefore I should not lay too much weight upon this locality, which, moreover, is the habitat of the very closely allied species *R. cinerea* Wall. This latter species, the type and only known specimen of which I examined in the British Museum, has the whole tail plain sooty black (all the twelve tail-feathers are present), whereas *R. lenzi* differs from it in having the terminal half of the outer web of the outermost tail-feather white.

R. lenzi in the British Museum differs from the specimens in our Museum in having the tip of the inner web of the outermost tail-feather also white. Count Salvadori, l. c., leans to the opinion that *R. lenzi* might be identical with *R. cinerea*, but for the above mentioned reason, I hardly think that this opinion will turn out to be correct.

60. *Rhipidura hoedti*, n. sp.

An adult female from the Island of Lettie, Timor group of islands, collected by the Dutch Naturalist Hoedt, May 24th 1866.

Closely allied to *R. tenkatei*, from which it differs, however, by the longer white tips to the two outermost pairs of tail-feathers and the pure white throat. It stands also near *R. isura*, from Australia, but is so much darker that it cannot be confounded with this latter species.

Above dark gray, darker on the head and nearly black on the front, back faintly tinged with brown, upper tail-coverts and tail sooty brown, tip of the outermost pair

at the length of an inch pure white, the outer web white up to the distance of an inch from the base; next pair with a large white spot at the tip, edged on the outer web with the color of the basal part; third pair with a very narrow wedge-shaped spot on the outer web near the shaft. Wings brown, coverts and quills edged with olive-brown, greater and median coverts tipped with white, forming a double row of white, inner secondaries edged and tipped with white, as in *R. setosa*, under wing-coverts ashy fulvous, inner edge of quills vinous gray, sides of head blackish, a distinct spot above the eye silky white, chin and throat pure white, chest pale ashy gray, with well-defined, somewhat black edged, lanceolate spots of white, flanks uniform ashy gray, centre of breast dirty white, abdomen and vent very pale ochre, under tail-coverts pure white, thighs dark gray, spotted with white. Bill entirely black, feet sooty brown. Wing 8,4 cm., tail 8,7, outermost pair 7,7, tarsus 1,8, culmen 1,5.

61. *Rhipidura vidua* Salvadori.

Hab. Koffiauw.

62. *Rhipidura setosa* (Quoy & Gaim.).

A great series from the Waigiou Archipelago (Guebeh, Gagie, Waigiou, Salwati, Mysol), from New Guinea (Bay Lobo, types of *R. gularis* Müll.), Seleh, Sorong, Dorey, Andai, Warbusi, Doktor) and the Bay of Geelvink (Meosnoum and Jobie).

This species is characterized by its ashy gray upper surface with darker head, the sooty brown upper tail-coverts and by the black tail having the outermost pair and sometimes also the next one tipped with white, the white reaching up halfway to the base on the outer web of the outermost pair, further by the superciliary streak, whole chin and throat, centre of breast and under tail-coverts, being pure white; chest ashy gray, some of the feathers with white shaft-streaks, abdomen buffy white.

Notes from the Leyden Museum, Vol. XV.

63. *Rhipidura kordensis* Meyer.

Rhipidura kordensis Meyer, Sitzb. k. Akad. Wien, LXX, p. 201 (1874).

Three specimens from Soëk, Geelvink Bay.

Closely allied to the large-billed *R. setosa*, from which it is distinguished by the black head and chest, and the white (instead of fulvous) breast, abdomen and under tail-coverts.

64. *Rhipidura obiensis* Salvadori.

Rhipidura obiensis Salvad. Orn. Pap. II, p. 59.

Rhipidura sp. Bernst. Ned. Tijdschr. Dierk. II, p. 135 (1865).

Nine specimens from Obi major and one from Obi lattu (Obi Islands).

Closely allied to the white-bellied *R. kordensis*, but having the chest more ashy, and the secondaries broadly edged with white on the outer web. From *R. finschi*, with which it agrees as to these white edgings, it is distinguished by its white instead of fulvous breast, abdomen and under tail-coverts.

65. *Rhipidura finschi* Salvadori.

Rhipidura finschi Salvad. Orn. Pap. III, p. 532.

A male from New Britain, and another from Duke of York Island.

66. *Rhipidura assimilis* Gray.

Six specimens from the Key Islands, three from Matabello and one, erroneously as I think, said to be from Mysol (von Rosenberg).

This species is at once distinguished from the other species of the *setosa*-group by a well-defined white superciliary stripe, beginning at the nostrils and ending at some distance behind the eye, while the other species have only a patch of silky white above the eye.

67. *Rhipidura isura* Gould.

Rhipidura isura Gould, P. Z. S. 1840, p. 174.

Rhipidura setosa (nec Quoy & Gaim.) Sharpe, Cat. Birds Br. Mus. IV, p. 329; (?) Salvad. Orn. Pap. II, p. 61.

An immature specimen from Australia, received from Gould, and an adult specimen from Port Essington, collected by Cockerell.

This species is undoubtedly fully entitled to specific rank, as it is easily distinguished from *R. setosa* by its dull earthy brown upper surface, by the white shaft-streaks on the much paler and narrower chest-band, and more especially by the greater extent of the white color on the tail-feathers. Amongst *R. setosa* the specimens with the greatest extent of white on the outermost tail-feathers (2 cm.) are those from the island of Guebeh, which birds have the white tips to the second pair much more strongly developed than those from any other locality. In the Australian specimens the white tip to the outermost pair is still longer, measuring 2,4 cm., and the white on the outer web is reaching nearer up to the base than in *R. setosa*. The white tip to the second pair is not longer than in our birds from Guebeh (1,5 cm.), but the third pair is, though very narrowly and in much worn tails not at all, tipped with white, a peculiarity already stated by Gould, whereas in none of our 30 specimens of *R. setosa* the slightest indication of such a tip can be found.

Our immature specimen represents a very interesting stage of plumage, having the upper surface earthy brown, the feathers of the back narrowly, the upper tail-coverts very broadly tipped with fulvous, wing-coverts and quills earthy brown, the median and greater coverts broadly tipped with buffy white, thus forming a double bar; tips to primary coverts as well as broad edges and tips to the secondaries dull white.

68. *Rhipidura rufiventris* (Vieill.).

Three specimens, the three types of *R. ochrogastra*

Notes from the Leyden Museum, Vol. XV.

Müll. & Schl., and two others, presented by von Rosenberg, all five specimens from Timor.

Upper surface gray, head black with a white patch above the eye, chin and throat white, feathers of the chest gray at the basal half, and so largely tipped with white that hardly any gray can be seen except on the sides of the chest on which the feathers are less tipped with white, breast, flanks, abdomen and under tail-coverts pale fulvous, tail black, outer web of first pair white nearly up to the base, inner web as well as the whole second pair tipped with white at more than an inch in length, the third pair with a narrow white tip near the shaft.

69. *Rhipidura javanica* (Sparrm.).

Eight specimens from Java, two from Sumatra, two from Banka, three from southern Borneo and a not fully adult specimen from »Indes orientales».

This is the only large-billed form with uniform gray chest, having the four outermost pairs of tail-feathers tipped with white. The immature female is much paler brown than the adult and has the wing-coverts broadly tipped with fulvous. The chest-band is very narrow and, even as the sides of the breast, earthy brown instead of gray.

70. *Rhipidura pectoralis* (Jerdon).

An adult male from the Indian Continent.

71. *Rhipidura nigritorquis* Vigors.

Five specimens from the Philippines and the Sulu Archipelago.

This large white-throated species is easily recognized by its very narrow black chest-band and having all but the innermost pair of tail-feathers broadly tipped with white.

72. *Rhipidura auricularis* De Vis.

Rhipidura auricularis De Vis, Ibis, 1891, p. 30.

Hab. Musgrave Range, S. E. New Guinea.

Notes from the Leyden Museum, Vol. XV.

73. *Rhipidura albifrontata* Franklin.

Three specimens from the Indian Continent.

Distinguished from all its congeners by the very broad pure white front and superciliary stripes, leaving only a narrow space on the centre of the crown black; throat black, rest of under surface white. All but centre tail-feathers broadly tipped with white, outer web of outermost pair entirely white.

74. *Rhipidura cockerelli* Ramsay.

Rhipidura cockerelli Ramsay, P. L. S. New South Wales, VI, p. 181 (1881); Sharpe, Birds of New Guinea, Vol. II., pl. 28.
Sauloprocta (?) *cockerelli* Salvadori, Orn. Pap. III, p. 531.

An adult male from Guadalcanar, Solomon Islands.

Upper surface, throat, chest and breast black, abdomen, under tail-coverts, numerous drop-shaped spots on the chest, a superciliary spot and the outer webs of inner secondaries pure white. Tail uniform black, nearly square.

75. *Rhipidura melaleuca* (Quoy & Gaim.).

Rhipidura tricolor (Vieill.) N. Dict. d'Hist. Nat. XXI, p. 490; Sharpe, Cat. B. Br. Mus. IV, p. 339.
Sauloprocta melaleuca Salvad. Orn. Pap. II, p. 48.

A series of about sixty specimens from Morotai, Halmahera, Ternate, Tidore, Motir, Batchian, Obi, Bouru, Amboyna, Ceram, Goram, Poulo Padjang, Aru, Mysol, Guebeh, Waigiou, New Guinea, Meosnoum, Duke of York, Cape York.

This species being only black and white, I fully agree with Count Salvadori, who rejected the oldest name (*tricolor*) in favor of the second (*melaleuca*), but on the other hand I could not find sufficient reason to separate it generically from *Rhipidura*.

Two nestlings of this species differ from the adult in having the upper wing-coverts narrowly tipped with brown and the superciliary streak as well as vent and under tail-coverts washed with fulvous.

Leyden Museum, September 1892.